

PRINTED CIRCUIT SUPPRESSION OF HIGH-FREQUENCY SPURIOUS SIGNALS

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ABSTRACT OF THE DISCLOSURE

5 In electronic equipment, such as, for example, a personal computer printed
circuit board, an arrangement for mitigating EMI, noise and other spurious signals at
high frequencies. The arrangement includes a discrete capacitor coupled between an
active pad and a reference pad. A conductor is coupled to the discrete capacitor and is
10 configured to include a serpentine trace and a terminating tuning capacitance that are
effectively series resonant at a predetermined frequency. In an exemplary
embodiment, the serpentine trace comprises a number of substantially linear, mutually
parallel segments that are joined by turns. The length and width of the serpentine
trace, together with the number and spacing of linear segments, cooperates with the
15 geometry of the tuning capacitance to determine the frequency of maximum
attenuation of spurious signals.